

**From:** [Todd, Brandi](#)  
**To:** [Leos, Valmichael](#)  
**Subject:** Re: % of pits investigated  
**Date:** Thursday, February 11, 2016 11:59:56 AM

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Thank u thank you thank you thank you!!!!!!

Thank you! Alan sent a PDF a while back with a drawn image of the area he estimated that we surveyed with the sonar. I would have thought we did a larger area too, but he was the man behind the screen, so if he doesn't comment back, we'll leave it as is.

Brandi Todd  
Federal On-Scene Coordinator  
US EPA Region 6  
Mobile : 972-974-2971

On Feb 11, 2016, at 11:00 AM, Leos, Valmichael <[Leos.Valmichael@epa.gov](mailto:Leos.Valmichael@epa.gov)> wrote:

See attached map for new data.

Underwater Investigation Area 1 14229 sq ft

Underwater Investigation Area 2 18132 sq ft

Underwater Investigation Area 3 21584 sq ft

Surface Investigation Area 22529 sq ft

Sonar Investigation Area 1786 sq ft

Area of cap underwater is = 19 acres – 6.5 acres = 823947 sq ft - 283619 sq ft =  
540,328 sq ft

(NOT including sonar survey which is overlapping) Total Percent of Underwater Cap  
surveyed by EPA Dive Team = sq ft of cap investigated underwater and surface / total  
sq ft of cap underwater x 100 = (14229+18132+21584+22529 sq ft) / 540,328 sq ft x  
100 = 76474 sq ft / 540,328 sq ft x100 =

**= 14.25 % of cap underwater cap surveyed by EPA Dive Team**

<!--[if !supportLists]-->•<!--[endif]-->Val's note. I think we are cheating ourselves of  
area surveyed by Sonar. I think we did a lot more than the small area you put  
on your map. Either way. This should give us a good idea of what area we  
surveyed.

Sincerely,

Valmichael Leos

Remedial Project Manager

U.S. Environmental Protection Agency Region 6

O: 214-665-2283

E: [leos.valmichael@epa.gov](mailto:leos.valmichael@epa.gov)

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**From:** Leos, Valmichael

**Sent:** Monday, January 25, 2016 10:09 AM

**To:** Humphrey, Alan <[Humphrey.Alan@epa.gov](mailto:Humphrey.Alan@epa.gov)>; Todd, Brandi  
<[Todd.Brandi@epa.gov](mailto:Todd.Brandi@epa.gov)>; Gannon, Nick <[Gannon.Nick@epa.gov](mailto:Gannon.Nick@epa.gov)>



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**Subject:** What % of pits are above water and below?

See figure. It is different from the one Alan sent out. For some strange reason, if there is Geospatial data embed in the PDF, I can't get the area or set a custom scale. Weird. I found a different figure that the RPs sent us long ago that does not have any Geospatial data embed. Area calculations work like a charm.

In summary:-

**Total Area** of cap is 823947 sq ft = **19 acres**

**Area** of cap above water is 283619 sq ft = **6.5 acres**

**Percentage** of cap above water = 6.5 acres / 19 acres x 100 = **34 percent**

**Percentage** of cap under water = 100 percent – 34 percent = **66 percent**

Sincerely,

Valmichael Leos

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